

**USH 41: USH 45 TO 9TH AVE (WINNEBAGO COUNTY)
CONTINUOUS (24 HOUR) CLOSURE
DIVERSION ROUTE: STH 21, USH 45**

OCTOBER
Analyzed for 2009
Construction Season

SUMMARY OF TRAFFIC MODEL OUTPUT
MON-THUR SOUTHBOUND DIRECTION

TIME OF DAY	FLOWS AND CAPACITY IN VEH/HR								AVERAGE SPEEDS IN MPH						
	MAIN ROUTE		ALTERNATE ROUTE		SITE CAPA CITY	FLOW MAIN ROUTE	FLOW DIVER -TING	TOTAL DIVN FLOW	AV.DEL PER VEH (MINS)	AVERAGE QUEUE (VEH)	MAIN ROUTE		ALTERNATE ROUTE		
	DEMAND FLOW	PCT HEAVY	NORMAL FLOW	PCT HEAVY							WITHOUT WORK ZN	WITH WORK ZN	SITE	WITHOUT WORK ZN	WITH WORK ZN
MID-1 AM	295	0.0	75	0.0	1500	295	0	75	0.45	0	65.8	52.2	44.3	22.6	22.6
1-2 AM	224	0.0	59	0.0	1500	224	0	59	0.44	0	66.0	52.5	44.6	22.9	22.9
2-3 AM	171	0.0	43	0.0	1500	171	0	43	0.44	0	66.1	52.7	44.8	23.0	23.0
3-4 AM	264	0.0	67	0.0	1500	264	0	67	0.45	0	65.9	52.4	44.4	22.7	22.7
4-5 AM	521	0.0	133	0.0	1500	521	0	133	0.47	0	65.4	51.5	43.4	21.9	21.9
5-6 AM	1239	0.0	316	0.0	1499	1239	0	316	0.72	0	64.1	45.6	36.7	19.5	19.5
6-7 AM	2203	0.0	562	0.0	1499	2000	202	764	8.88	254	62.3	12.4	30.8	16.3	15.4
7-8 AM	3065	0.0	782	0.0	1500	1823	1242	2024+	28.07	748	55.1	7.1	30.8	13.4	9.6
8-9 AM	2334	0.0	595	0.0	1499	1218	1115	1710+	26.21	684	62.0	7.3	30.8	15.8	9.9
9-10 AM	1966	0.0	501	0.0	1500	1323	644	1145	16.98	433	62.7	8.6	30.8	17.1	12.6
10-11 AM	1950	0.0	496	0.0	1500	1501	449	945	14.45	363	62.8	9.2	30.8	17.1	13.8
11A-NOON	2041	0.0	520	0.0	1500	1538	504	1024	15.33	387	62.6	8.9	30.8	16.8	13.3
NOON-1PM	2112	0.0	538	0.0	1499	1533	580	1118	16.52	419	62.5	8.6	30.8	16.6	12.7
1-2 PM	2231	0.0	568	0.0	1500	1568	663	1231	18.18	464	62.2	8.3	30.8	16.2	12.0
2-3 PM	2561	0.0	653	0.0	1500	1684	877	1529+	23.11	602	60.2	7.6	30.8	15.1	10.6
3-4 PM	2905	0.0	741	0.0	1500	1638	1267	2008+	29.22	773	56.8	7.0	30.8	13.9	9.3
4-5 PM	3159	0.0	805	0.0	1499	1498	1661	2466+	30.99	826	54.2	6.8	30.8	13.1	9.0
5-6 PM	2722	0.0	694	0.0	1499	1384	1337	2031+	29.68	781	58.6	7.0	30.8	14.5	9.3
6-7 PM	1720	0.0	439	0.0	1499	1035	685	1124	16.88	447	63.2	8.8	31.3	17.9	13.0
7-8 PM	1191	0.0	304	0.0	1499	1174	17	321	2.97	103	64.1	24.5	35.8	19.6	19.6
8-9 PM	1031	0.0	263	0.0	1500	1031	0	263	0.52	0	64.5	49.7	41.5	20.2	20.2
9-10 PM	812	0.0	207	0.0	1500	812	0	207	0.50	0	64.9	50.5	42.4	20.9	20.9
10-11 PM	606	0.0	154	0.0	1500	606	0	154	0.48	0	65.3	51.2	43.1	21.6	21.6
11PM-MID	376	0.0	96	0.0	1500	376	0	96	0.46	0	65.7	52.0	44.0	22.4	22.4

+ INDICATES DIVERSION FLOW EXCEEDS USER-SPECIFIED WARNING LIMIT

----- SITE BREAKDOWN DELAYS -----	
BREAKDOWN DURATION (MINS)	0
RANGE OF QUEUE DELAY - MIN	0.0
(VEH-H) MAX	0.0
RANGE OF DIVN DELAY - MIN	0.0
(VEH-H) MAX	0.0
AV BREAKDOWNS PER DAY	0.00
AV QUEUE DELAY/DAY (VEH-H)	0.0
AV DIVN DELAY/DAY (VEH-H)	0.0
AV TOTAL DELAY/DAY (VEH-H)	0.0

----- SITE ACCIDENT DELAYS -----	
ACCIDENT DURATION (MINS)	0
RANGE OF QUEUE DELAY - MIN	0.0
(VEH-H) MAX	0.0
RANGE OF DIVN DELAY - MIN	0.0
(VEH-H) MAX	0.0
AV ACCIDENTS PER DAY	0.00
AV QUEUE DELAY/DAY (VEH-H)	0.0
AV DIVN DELAY/DAY (VEH-H)	0.0
AV TOTAL DELAY/DAY (VEH-H)	0.0

AVERAGE ACCIDENT NUMBERS (PIA/DAY)	
MAIN ROUTE WITHOUT WORKS	0.0114
MAIN ROUTE WITH WORKS	0.0063
DIVERSION	0.0777

PIA: Personal Injury Accidents

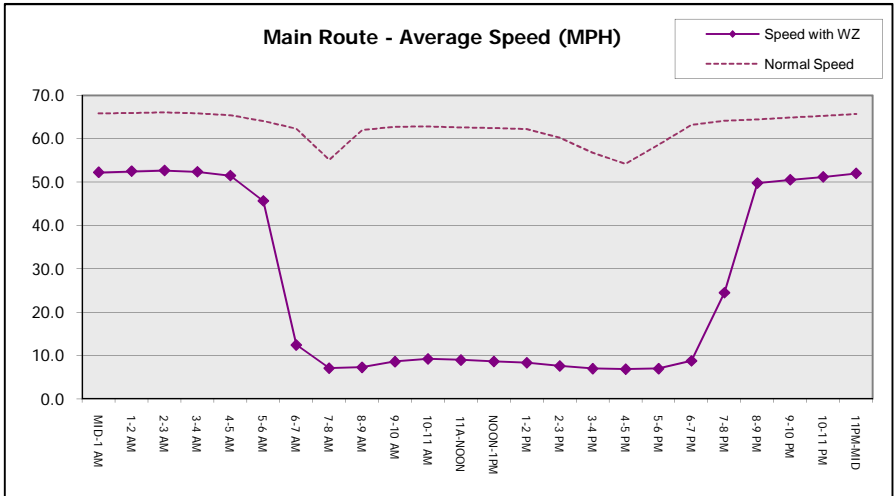
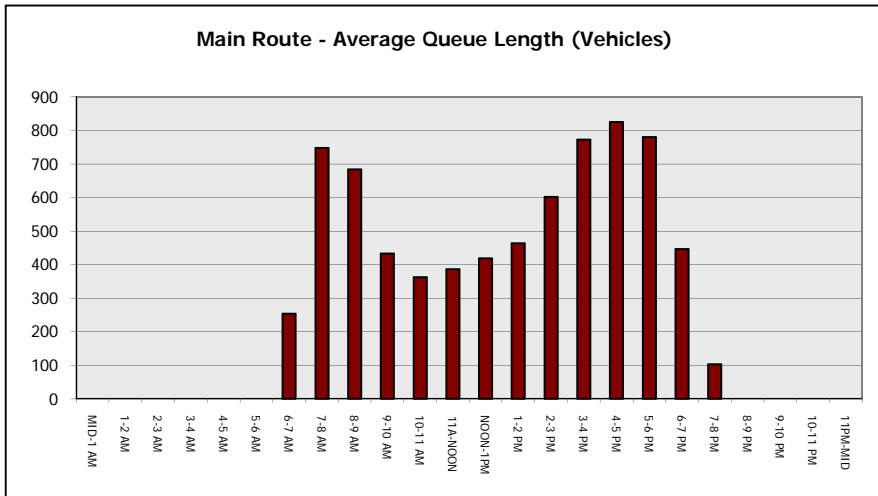
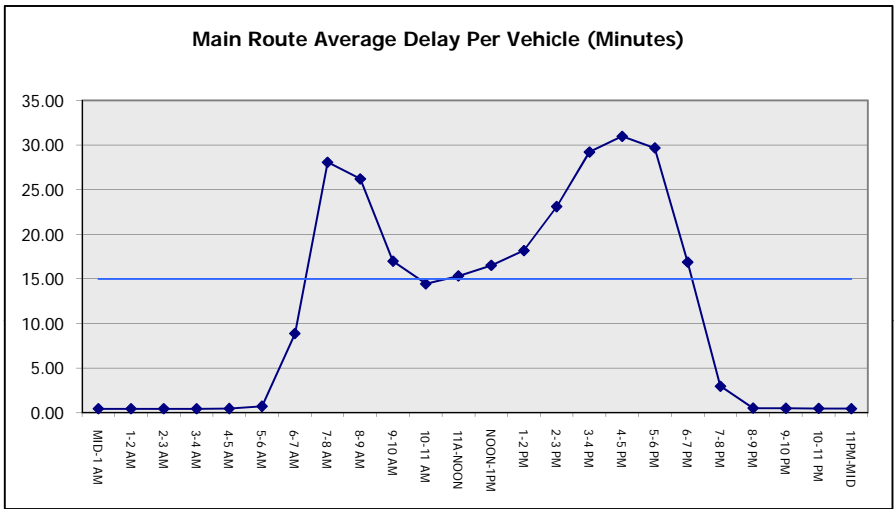
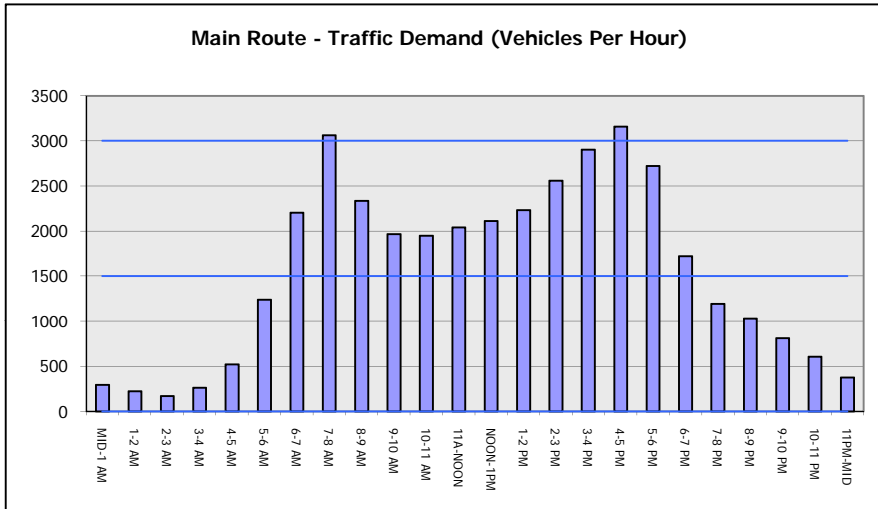
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY (DOLLARS)	\$170,960
CONGESTED HOURS PER DAY*	11

*Delays Exceeding 15 Minutes

**USH 41: USH 45 TO 9TH AVE (WINNEBAGO COUNTY)
 CONTINUOUS (24 HOUR) CLOSURE
 DIVERSION ROUTE: STH 21, USH 45**

OCTOBER
 Analyzed for 2009
 Construction Season

GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT
MON-THUR SOUTHBOUND DIRECTION



USH 41: USH 45 TO 9TH AVE (WINNEBAGO COUNTY) CONTINUOUS (24 HOUR) CLOSURE DIVERSION ROUTE: STH 21, USH 45	OCTOBER
	Analyzed for 2009 Construction Season

SUMMARY OF TRAFFIC MODEL OUTPUT

MON-THUR NORTHBOUND DIRECTION

TIME OF DAY	FLOWS AND CAPACITY IN VEH/HR								AVERAGE SPEEDS IN MPH						
	MAIN		DIVERSION		SITE CAPA CITY	FLOW MAIN ROUTE	FLOW DIVER -TING	TOTAL DIVN FLOW	AV.DEL PER VEH (MINS)	AVERAGE QUEUE (VEH)	MAIN ROUTE		SITE	ALTERNATE ROUTE	
	DEMAND FLOW	PCT HEAVY	NORMAL FLOW	PCT HEAVY							WITHOUT WORK ZN	WITH WORK ZN		WITHOUT WORK ZN	WITH WORK ZN
MID-1 AM	211	0.0	54	0.0	1500	211	0	54	0.44	0	66.0	52.5	44.6	22.2	22.2
1-2 AM	161	0.0	41	0.0	1500	161	0	41	0.44	0	66.1	52.7	44.8	22.5	22.5
2-3 AM	155	0.0	39	0.0	1500	155	0	39	0.44	0	66.1	52.7	44.8	22.5	22.5
3-4 AM	203	0.0	51	0.0	1500	203	0	51	0.44	0	66.0	52.5	44.6	22.2	22.2
4-5 AM	359	0.0	92	0.0	1500	359	0	92	0.46	0	65.7	52.0	44.0	21.2	21.2
5-6 AM	1008	0.0	257	0.0	1499	1008	0	257	0.56	0	64.5	48.9	40.4	16.8	16.8
6-7 AM	1874	0.0	479	0.0	1499	1874	0	479	4.54	135	62.9	18.9	30.8	11.8	12.2
7-8 AM	2668	0.0	680	0.0	1500	1862	806	1486+	27.51	730	59.2	7.1	30.8	8.7	9.7
8-9 AM	1902	0.0	485	0.0	1499	1459	444	928+	28.70	747	62.8	7.0	30.8	11.7	9.4
9-10 AM	1798	0.0	458	0.0	1499	1429	370	828+	25.38	657	63.0	7.3	30.8	12.1	10.1
10-11 AM	1803	0.0	459	0.0	1500	1490	314	773+	23.84	616	63.0	7.5	30.8	12.1	10.4
11A-NOON	1850	0.0	472	0.0	1500	1531	318	790+	24.28	628	63.0	7.5	30.8	11.9	10.2
NOON-1PM	1915	0.0	488	0.0	1500	1557	358	846+	25.91	672	62.8	7.3	30.8	11.7	9.9
1-2 PM	1998	0.0	509	0.0	1499	1579	419	927+	28.32	738	62.7	7.1	30.8	11.4	9.5
2-3 PM	2267	0.0	578	0.0	1500	1502	765	1342+	29.95	782	62.2	7.0	30.8	10.3	9.3
3-4 PM	2548	0.0	650	0.0	1500	1503	1044	1694+	29.93	784	60.4	6.9	30.8	9.2	9.3
4-5 PM	2918	0.0	744	0.0	1500	1519	1399	2143+	30.45	806	56.6	6.9	30.8	7.9	9.1
5-6 PM	2705	0.0	690	0.0	1500	1465	1240	1930+	30.16	794	58.8	6.9	30.8	8.6	9.2
6-7 PM	1791	0.0	455	0.0	1500	1332	459	914+	28.23	735	63.0	7.1	30.8	12.2	9.6
7-8 PM	1185	0.0	302	0.0	1500	1024	161	462	13.06	353	64.1	9.9	32.7	15.6	14.3
8-9 PM	968	0.0	245	0.0	1500	968	0	245	0.85	16	64.6	43.6	41.6	17.1	17.1
9-10 PM	756	0.0	193	0.0	1500	756	0	193	0.50	0	65.0	50.7	42.5	18.5	18.5
10-11 PM	554	0.0	141	0.0	1500	554	0	141	0.48	0	65.3	51.4	43.3	19.9	19.9
11PM-MID	381	0.0	97	0.0	1500	381	0	97	0.46	0	65.7	51.9	44.0	21.1	21.1

+ INDICATES DIVERSION FLOW EXCEEDS USER-SPECIFIED WARNING LIMIT

----- SITE BREAKDOWN DELAYS -----	
BREAKDOWN DURATION (MINS)	0
RANGE OF QUEUE DELAY - MIN (VEH-H) MAX	0.0
RANGE OF DIVN DELAY - MIN (VEH-H) MAX	0.0
AV BREAKDOWNS PER DAY	0.00
AV QUEUE DELAY/DAY (VEH-H)	0.0
AV DIVN DELAY/DAY (VEH-H)	0.0
AV TOTAL DELAY/DAY (VEH-H)	0.0

----- SITE ACCIDENT DELAYS -----	
ACCIDENT DURATION (MINS)	0
RANGE OF QUEUE DELAY - MIN (VEH-H) MAX	0.0
RANGE OF DIVN DELAY - MIN (VEH-H) MAX	0.0
AV ACCIDENTS PER DAY	0.00
AV QUEUE DELAY/DAY (VEH-H)	0.0
AV DIVN DELAY/DAY (VEH-H)	0.0
AV TOTAL DELAY/DAY (VEH-H)	0.0

AVERAGE ACCIDENT NUMBERS (PIA/DAY)	
MAIN ROUTE WITHOUT WORKS	0.103
MAIN ROUTE WITH WORKS	0.0061
DIVERSION	0.0624

PIA: Personal Injury Accidents

IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY (DOLLARS)	\$187,279
CONGESTED HOURS PER DAY*	12

*Delays Exceeding 15 Minutes

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 CONTINUOUS (24 HOUR) CLOSURE
 DIVERSION ROUTE: STH 21, USH 45**

OCTOBER
 Analyzed for 2009
 Construction Season

GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT
MON-THUR NORTHBOUND DIRECTION

